

## **Department of Energy**

Idaho Operations Office 850 Energy Drive Idaho Falls, Idaho 83401-1563

May 14, 2002

Mr. Wayne Pierre, Team Leader Environmental Cleanup Office U.S. Environmental Protection Agency Region X 1200 Sixth Avenue Seattle, Washington 98101

Mr. Dean Nygard, Site Remediation Program Manager Idaho Department of Environmental Quality Waste Management and Remediation Program 1410 N. Hilton Boise, Idaho 83706

SUBJECT: Transmittal of the Final ICDF Remedial Design/Construction Work Plan Title II
Design (EM-ER-02-083)

Dear Mr. Pierre and Mr. Nygard:

Enclosed is the *Final ICDF Remedial Design/Construction Work Plan*. Contained in this document are the engineering calculations, specifications, drawings along with the necessary plans (construction quality assurance, waste management, etc.) for the design and construction of the INEEL CERCLA Disposal Facility (ICDF) landfill and evaporation pond. The attached design and construction package (contents listed below) is being submitted to meet the requirements of the Federal Facility Agreement and Consent Order (FFA/CO).

As was discussed and agreed to during the May 2, 2002 comment resolution meeting, only one complete copy (full document) is being sent to both the EPA and IDEQ. A compact disc (CD) of the complete document is also provided. The remaining copies contain the pages that changed as a result of comment resolution and your other copies should be updated accordingly. This was done to reduce the amount of printing and paper disposal (waste minimization).

#### ICDF Remedial Design/Construction Work Plan

ICDF Remedial Design/Construction Work Plan, DOE-ID-10848

#### Appendices Volume 1 of 5 – Design Analysis

- Appendix A Leachate/Contaminant Reduction Time Study, EDF-ER-274
- Appendix B Fate and Transport Modeling Results and Summary Report, EDF-ER-275
- Appendix C Liner/Leachate Compatibility Study, EDF-ER-278

### Appendices Volume 2 of 5 – Design Analysis (cont.)

- Appendix D Evaluation of Geotechnical Investigations and Calculations Required to Complete Design & Construction, EDF-ER-276
- Appendix E Seismic Evaluation of Landfill and Evaporation Pond, EDF-ER-282
- Appendix F Subsurface Consolidation Calculations, EDF-ER-266
- Appendix G Slope Stability Assessments, EDF-ER-268
- Appendix H Landfill Compaction/Subsidence Study, EDF-ER-267
- Appendix I Waste-Soil Design Ratio Calculations, EDF-ER-277
- Appendix J Liner and Final Cover Long Term Performance Evaluation and Final Cover Life Cycle Expectation, EDF-ER-281
- Appendix K Landfill Leachate Collection System Design Analysis, EDF-ER-280
- Appendix L Evaporation Pond Sizing with Water Balance and Make-up Water Calculations, EDF-ER-271
- Appendix M Hydrologic Modeling of Final Cover, EDF-ER-279

#### Appendices Volume 3 of 5 – Design Analysis (cont.)

- Appendix N IDAPA Preliminary Air Screening Results, EDF-ER-315
- Appendix O NESHAP Modeling for the ICDF Complex, EDF-ER-290
- Appendix P Waste Acceptance Criteria for ICDF Landfill, DOE/ID-10865
- Appendix Q Waste Acceptance Criteria for ICDF Evaporation Pond, DOE/ID-10866
- Appendix R Screening Level Ecological Risk Assessment, EDF-ER-311
- Appendix S ICDF Complex Groundwater Monitoring Plan, DOE/ID-10955
- Appendix T Waste Placement Plan, EDF-ER-286

#### Appendices Volume 4 of 5 - Construction

- Appendix U INEEL CERCLA Disposal Facility Test Pad Construction Report, EDF-2899
- Appendix V Storm Water Pollution Prevention Plan for the ICDF Landfill and Evaporation Pond, PLN-962
- Appendix W INEEL CERCLA Disposal Facility Construction Waste Management Plan, DOE/ID-10958
- Appendix X INEEL CERCLA Disposal Facility Construction Quality Assurance Plan, DOE-ID-10851
- Appendix Y Technical Specifications for the INEEL CERCLA Disposal Facility, SPC-1476
- Appendix Z INEEL CERCLA Disposal Facility Drawings

### Appendices Volume 5 of 5 - Project Management and Supporting Design Files

- Appendix AA Project Schedule and Assumptions
- Appendix BB Detailed Cost Estimate
- Appendix CC Technical and Functional Requirements WAG 3 INEEL CERCLA Disposal Facility and Evaporation Pond, TFR-71

- Appendix DD Technical and Functional Requirements for the INEEL CERCLA Disposal Facility (ICDF) Control and Integrated Waste Tracking System, TFR-2520
- Appendix EE Comment Resolution Forms
- Appendix FF Permeable Reactive Barrier Decision Analysis, EDF-ER-273
- Appendix GG Leachate Generation Study, EDF-ER-269

Comment received from the EPA and IDHW on both the Draft Remedial Design/Remedial Action Work Plan (RD/RA WP) and Draft Final ICDF RD/CWP have been included along with the comment responses. All comments on the design/construction and remedial action components have been addressed in the comment response tables. If you have any questions, please call Talley Jenkins at (208) 526-4978 or myself at (208) 526-4392.

Sincerely,

Kathleen & Hair

Kathleen Hain, Manager Environmental Restoration Program

#### Enclosure

Cc:

M. English, IDEQ, 1410 N. Hilton, Boise, Idaho 83706 (5)

T. Kluk, DOE-HQ, EM-441 w/o enc. R. Cummings, DOE-HQ, EM-441 (1)

File: 6452.3.13 EM-ER-02-083

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## **RECORD NOTES:**

- 1. This letter was prepared to transmit the Final ICDF RD/CWP to the State and EPA.
- 2. This letter was prepared based on discussions between T. Jenkins and K. Hain (EM/ER).
- 3. This letter/memo closes OATS number N/A.
- 4. The attached correspondence has no relation to the Naval Nuclear Propulsion Program. Naval Reactors concurrence is not required.

TWJenkins (EM/ER): File: Final ICDF RD\_CWP.doc